Kirill Ryzhikov

Email : k.ryzhikov@yahoo.com
Mobile : +44 7539 898109
Github: kryzhikov
Telegram: @kryzhikov

Personal Info

Quantitative finance enthusiast with experience in alpha signals and strategies, utilizing machine learning and market microstructure. Interested in Market Structure Research applying machine learning and HFT strategies.
Looking for relocation possibilities, visa sponsorship needed.

Experience

Squarepoint Capital LLP — London, UK

- ***Quantitative Researcher****, microstructure alpha research* — *October 2022 - Present*
  Market Microstructure | Machine Learning | Deep Learning | PyTorch | Boosting | Finance
  - Conducting market microstructure research with ML/DL to extract alphas.
  - Deploying latency-sensitive alpha signals live.
  - Covering equity and futures markets in multiple regions.

Myna Labs — San Francisco, USA (remote)

- ***Engineer and Research Advisor****, computer vision and signal processing* — *November 2021 - Present (Advisor)*
  Deep Learning | PyTorch | Triton | CUDA | Machine Learning | Time Series
  - Research on real-time audio-driven video generation.
  - Deploying DL services as server-side and serverless solutions.
  - Increased server-side solution performance by **50%** and enabled parallel request processing.

Tinkoff Bank — Moscow, Russia

- ***Machine Learning Researcher****, Deep learning tasks in computer vision, NLP, signal processing* — *March 2020 - Nov. 2021*
  Deep Learning | PyTorch | Triton | CUDA | Machine Learning | SQL
  - Building cutting-edge banking and non-banking products.
  - Deployed DL models in production, performed research, wrote publications.
  - Reduced face-parsing database size by **10**x. Developed AI chatbot with talking head.

Education

- **Moscow State University** — Moscow, Russia
  Bachelor's Degree in Computer Science — *Sept. 2019 - Aug. 2023*
  - **Department**: Dept. of Mathematical Statistics, Mathematical Finance Lab
  - **Thesis**: Developing a news-aware event-driven trading algorithm
  - **GPA**: 4.5/5
- **Center of Mathematical Finance** — Online
  Quantitative Finance — *Sept. 2021 - Aug. 2022*
  - **First Year**: Developed option pricing and HFT strategies
  - **Graduate Project**: Researched Uniswap v3 AMM strategies

Other Activities

Quant — Moscow, Russia

- ***Quant****, Developed HFT Strategy for crypto markets* — *Summer 2022*
  HFT | Market Making | C++
  - Developed market making strategy, covering 5 crypto exchanges and 200+ coins per exchange.
  - Optimized rate limit usage for global market coverage.
  - Completed USD-margined market maker qualification on all markets, maintaining $600M+ weekly maker volume.
- **Tinkoff ML/DL Educational Programs** — Moscow, Russia
  Lecturer, ML/DL course owner, Seminar teacher — *23 Nov. 2020 - Present*
  Created two courses in ML and DL. Led a team of 4 teachers and 1 manager. 30% of students later joined Tinkoff as interns.

Publications

- **63rd All-Russian Scientific Conference at MIPT** — Moscow, Russia
  Best research paper and project in AI section — *23 Nov. - 29 Nov. 2020*
  Presented a SOTA approach for facial mimic reenactment from audio/video, using transposed convolutions and specific audio/mimic representation, resulting in a real-time talking head generation service.

Programming Skills

- **Languages**: Python, C++, CUDA, q/kdb+.
- **Technologies**: Git, Docker, Linux.
- **Knowledge**: Algorithms, Data Structures, Market Microstructure, Machine Learning, Deep Learning, CI/CD.